

Applicant : Donald W. Petersen et al.
Serial No. : 09/915,997
Filed : July 26, 2001
Page : 7



Attorney's Docket No.: 06317-038002

COPY OF PAPERS
ORIGINALLY FILED

Pending Claims After The Entering Of The Above Amendments

RECEIVED

MAY 28 2002

TECH CENTER 1600/2900

1. A bone graft substitute composition, consisting essentially of:
calcium sulfate;
a mixing solution; and
a plasticizing substance.
2. The composition of claim 1, wherein the calcium sulfate comprises calcium sulfate hemihydrate.
3. The composition of claim 1, wherein the plasticizing substance comprises a cellulose derivative.
4. The composition of claim 1, wherein the plasticizing substance is selected from a group consisting of sodium carboxymethylcellulose, methylcellulose, hydroxypropyl methyl cellulose, hydroxypropyl cellulose, ethylcellulose, hydroxyethylcellulose, and cellulose acetate butyrate.
5. The composition of claim 1, wherein the plasticizing substance comprises hydroxypropyl methyl cellulose.
6. The composition of claim 1, wherein the plasticizing substance comprises hydroxypropyl cellulose.
7. The composition of claim 1, wherein the plasticizing substance comprises hyaluronic acid.
8. The composition of claim 1, wherein the plasticizing substance comprises methylcellulose.
9. The composition of claim 1, wherein the mixing solution is selected from a group consisting of sterile water, inorganic salt, and cationic surface active agent.
10. The composition of claim 9, wherein the cationic surface active agent is selected from a group consisting of sodium chloride, phosphate buffered saline, potassium chloride, sodium sulfate, ammonium sulfate, ammonium acetate, and sodium acetate.
11. The composition of claim 1, wherein the mixing solution comprises sterile water.
12. The composition of claim 1, wherein the composition does not comprise a polymer matrix.
13. The composition of claim 1, wherein the composition does not comprise bone.

14. The composition of claim 1, consisting essentially of:
100 parts by weight of the calcium sulfate;
about 1.5 to about 8 parts by weight of the plasticizing substance; and
about 25 to about 65 parts by weight of the mixing solution.
15. The composition of claim 1, consisting essentially of:
100 parts of the calcium sulfate;
about 5.25 parts by weight of the plasticizing substance; and
about 33.6 parts by weight of the mixing solution.
16. A bone graft substitute composition, consisting of:
calcium sulfate hemihydrate;
a mixing solution; and
a plasticizing substance.
17. The composition of claim 16, wherein the plasticizing substance comprises a cellulose derivative.
18. The composition of claim 16, wherein the plasticizing substance is selected from a group consisting of sodium carboxymethylcellulose, methylcellulose, hydroxypropyl methyl cellulose, hydroxypropyl cellulose, ethylcellulose, hydroxyethylcellulose, and cellulose acetate butyrate.
19. The composition of claim 16, wherein the plasticizing substance comprises hydroxypropyl methyl cellulose.
20. The composition of claim 16, wherein the plasticizing substance comprises hydroxypropyl cellulose.
21. The composition of claim 16, wherein the plasticizing substance comprises hyaluronic acid.
22. The composition of claim 16, wherein the plasticizing substance comprises methylcellulose.
23. The composition of claim 16, wherein the mixing solution is selected from a group consisting of sterile water, inorganic salt, and cationic surface active agent.
24. The composition of claim 23, wherein the cationic surface active agent is selected from a group consisting of sodium chloride, phosphate buffered saline, potassium chloride, sodium sulfate, ammonium sulfate, ammonium acetate, and sodium acetate.
25. The composition of claim 16, wherein the mixing solution comprises sterile water.

Applicant : Donald W. Petersen et al.

Serial No. : 09/915,997

Filed : July 26, 2001

Page : 9

Attorney's Docket No.: 06317-038002

26. The composition of claim 16, consisting of:
100 parts by weight of the calcium sulfate hemihydrate;
about 1.5 to about 8 parts by weight of the plasticizing substance; and
about 25 to about 65 parts by weight of the mixing solution.

27. The composition of claim 16, consisting of:
100 parts of the calcium sulfate hemihydrate;
about 5.25 parts by weight of the plasticizing substance; and
about 33.6 parts by weight of the mixing solution.